

AMENDMENTS TO THE CLAIMS:

1-58. (Cancelled)

59. (Currently Amended) A method according to claim 65, [[of]] where minimizing the number of connections in [[a]] the conductive path of [[an]] the electrode array is minimized to two for diagnosing the presence of a disease state in a living organism and [[a]] the connector that electrically links the electrode array to an electronic module, the method comprising: a) providing a plurality of spaced unlinked conducting surfaces on the electrode array; b) providing a plurality of spaced unlinked conducting surfaces on the connector, with two of the conducting surfaces selected to be connected to the conductive path; and c) placing the electrode array and connector in electrical contact with respect to one another by overlapping the spaced unlinked conductive surfaces of the electrode array with the spaced unlinked conductive surfaces of the connector to form a continuous conductive path between the two selected conducting surfaces.

60. (Original) A method according to claim 59 wherein the spaced unlinked conducting surfaces on the electrode array are spaced generally around an opening provided by the array, and the spaced unlinked conducting surfaces on the connector are spaced around a similar opening provided by the connector.

61. (Original) A method according to claim 60 wherein the two selected conducting surfaces of the connector are adjacent to one another.

62. (Original) A method according to claim 61 wherein a gap is provided in the spacing of the unlinked conducting surfaces of the electrode array so that when the electrode array and connector are placed in overlapping relation the gap is positioned with respect to the adjacent

selected conducting surfaces of the connector so that the continuous conductive path does not extend directly therebetween.

63. (Original) A method according to claim 62 wherein an alignment means is provided to ensure that the electrode array and connector overlie to form a continuous conductive path between the two selected conducting surfaces.

64. (Original) A method according to claim 63 wherein the conductive path is a ground conductive path.

65. (Original) A method of confirming an operable electrical contact between a plurality of spaced unlinked conducting surfaces of an electrode array and a plurality of spaced unlinked conducting surfaces of a connector, the method comprising: a) placing the electrode array and connector in electrical contact with respect to one another by overlapping the spaced unlinked conductive surfaces of the electrode array with the spaced unlinked conductive surfaces of the connector to form a continuous conductive path between two selected conducting surfaces; and b) measuring a test signal over the conductive path between the two selected conducting surface to see if an operable electrical contact has been established.

66. (Original) A method according to claim 65 wherein the conductive path is a ground conductive path.

67. (Original) A method according to claim 66 wherein electrical resistance is measured and compared to a pre-established value for an operable electrical contact.

68. (Original) A method according to claim 67 wherein placing the electrode array and connector in electrical contact with respect to one another places respective terminals for

electrodes of the electrode array into electrical contact with respective conductive surfaces of the connector and the test establishes whether proper electrical contact between the respective terminals and conductive surfaces has been established.

69. (Currently Amended) A method according to claim 65, of forming an electrode array further comprising the step of [[for]] diagnosing the presence of a disease state in a living organism from a plurality of electrode array elements, wherein each electrode array element comprises a body having at least one arm extending from the body with at least one electrode provided on the arm, the method step of diagnosing comprising: a) overlying the plurality of electrode array elements at the respective bodies thereof to form a main body of the electrode array with the arms of the respective electrode array elements extending from the main body in spaced relation; and b) clamping the plurality of electrode array elements together.

70. (Original) A method according to claim 69 wherein alignment means is provided to ensure that the arms of the respective electrode array elements extend around the main body of the electrode array in spaced relation.

71. (Original) A method according to claim 70 wherein a retaining member is used in clamping the plurality of electrode array elements together, and the retaining member comprises a stiffening member adapted to flatten part of the tissue of the living organism being diagnosed.

72. (Original) A method according to claim 71 wherein the stiffening member is in the form of a ring.

73-125. (Cancelled)